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BULLETIN OF THE WISCONSIN STATE
BOARD OF INDUSTRIAL EDUCATION

NO. 5

Industrial and Continuation Schools

THEIR FOUNDATION, ORGANIZATION, AND
ADJUSTMENT TO THE LIFE OF
THE COMMUNITY

BY

LOUIS E. REBER

Dean, University Extension Division
The University of Wisconsin

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AMPHILAO

Industrial and Continuation Schools

Their Foundation, Organization, and Adjustment to the Life of the Community*

Defects of Present System

Wisconsin in the adoption of a law designed to promote the establishment of "industrial, commercial, continuation, and evening schools" recognizes the weakness of her present educational system, not only in its failure to hold an appallingly large percentage of its boys and girls through the high school or even through the 8th grade, but also in its lack of provision of further educational opportunity for these large numbers who have left school and are engaged in wage earning.

When the early movement began which led to the introduction of the manual arts into the public schools, educators were already inquiring into the reasons for the rapid falling off of interest, which caused so many children, who were under no compulsion to support themselves or contribute to the support of their families, to leave school and begin work. During the intervening years the theory of industrial training has been preached to the world from every platform. We have been told that as the primitive races began with simple agricultural, mechanical, and domestic activities, so should the child in his training begin with similar experiences—in his initial steps being taught to *do* things, afterward finding all of his book studies closely related to these fundamental life operations, these *action* studies, which constitute the nucleus around which the rest of his education should be built. Thus, said the theorizer, would the interest of the pupil be held

* Paper read before the Wisconsin Association of City Superintendents and Supervising Principals at Milwaukee, Wisconsin, March 29, 1912, and printed by the State Board of Industrial Education at the request of the Association.

because he would constantly realize the value of his school training as a preparation for life.

In accordance with this admirable argument, it was believed that the introduction of courses of manual arts into the schools would overcome the faults of the prevailing methods. But what has been the fact? How has the theory been applied in practice? The academic teacher readily recognized the appeal of manual training to the *brain*, but until recently, definitely repudiated the conception that the work might become a process of value in itself as a vocational asset. He was slow or unwilling to see that the general educational value of manual work might be retained and at the same time the kind of training which was demanded by the industrial world be secured. On account of this attitude on the part of the school force, little that was really worth while in the way of vocational education was brought into the schools, until it was forced in by the call of the industries for an educational schedule that would relate the pupil's training with his life experiences, or in other words, one that would make for efficiency.

Following upon the wave of enthusiasm which established courses in manual arts in schools throughout the country, and partly as a result of their partial failure, the attention of educators was directed toward the vocational schools of other countries, especially those of Germany. Careful study of their great educational work, both in its application and its results, has helped us to realize the defects of our system and to determine the first steps to be taken in the direction of reform. Not only do we now recognize the effective remedy in training for efficiency, but its application has been started with such power and momentum that we believe the day is past when any force could arrest it.

Inertia Opposed to Change

The inevitable inertia encountered by every movement that works toward a change in a thoroughly established institution of many year's growth, is still to be overcome in a large measure. It is this inertia (or shall I call it loyalty to tradition?) that has made it difficult in many places to introduce industrial training in its full development into our established schools. It is to avoid the heedless waste of power required to overcome this inertia, that the legislature in Wisconsin has provided a separate board of directors for the "industrial, commercial, continuation, and evening schools" binding the established school system to the new by

making the Superintendent of Public Instruction a member of both boards and requiring that the new board shall be appointed by the old board. The wisdom of providing a board consisting of men engaged in industrial pursuits, employer and employed, is clear and does not necessarily convey a reproach to the established school force.

Differentiation in the grade and high schools designed to meet the needs of individual cases, will undoubtedly be brought about more simply and effectively, for a time at least, by the establishment of separate schools, under a management closely identified with the commercial and industrial interests of the community.

The Influence of Lay Forces

The fact that the industrial demand rather than pressure from academic forces is responsible for the present almost universal movement, has been amply demonstrated in a number of places.

In Chicago, for example, the inquiry into the subject of industrial education, its needs in this country and its development abroad, now being made by Mr. E. G. Cooley for the Commercial Club, is without question a strong factor in the general movement, and in its published reports will present a comprehensive and valuable study of the entire problem.

In Cincinnati, I think it is safe to say, that one of the chief influences which led the public schools to introduce effective industrial work, was observation of the successful operation of a small private industrial school for apprentices, maintained by certain manufacturers.

In Cleveland, the reorganization of the entire school system was brought about by the appointment of a committee made up largely of men interested in the industries. The school board which inaugurated the present system was elected for the purpose of carrying out the recommendations of this committee. The reorganization was in a measure forced into the schools with the result that during the six years of its development, an opposition gathered which finally led to a condition which threatens to retard its advancement. This delay, however, can be only temporary. If industrial training should be removed from the schools, or if the work should not continue to progress, I believe the people would demonstrate at the next election their appreciation of, and belief in what has already been accomplished. Cleveland can not go backward in this work. She has gone too far in demonstrating the value of vocationalized education.

In Indianapolis, where some excellent results have been obtained, I am told that the school men as a class have been conservative in their endorsement of industrial teaching. The legislature of Indiana at its last session appointed an industrial commission to investigate the subject of industrial education for the purpose of recommending legislation. A few days ago this board called a meeting in the city of Indianapolis of those interested in the subject. Only three school men appeared, while the industrial and commercial interests were fully represented.

A recent communication from the Secretary of the Manufacturers' Association of Iowa, describes the interest of this body in industrial education. The Association is so thoroughly aroused that it proposes to continue vigorously the agitation for industrial education until something definite is accomplished.

In Massachusetts, both at Fitchburg and at Beverly, the coöperation between the school and industrial establishments was brought about largely through the initiative of manufacturers.

The New York Central Railroad Company, by giving instruction to its employes, has been for years setting an example of vocationalizing instruction by relating it to a given industry. Much may be learned similarly, from the schools of the General Electric Company, of the Atchison, Topeka and Santa Fe Railroad Company, of the John Wanamaker Stores of Philadelphia and New York, and of many other farsighted corporations.

Separate Boards Essential

Examples might be multiplied, but enough has been said to show that past experience supplies evidence that a system of industrial education will probably be developed more rapidly and effectively if, though made a part of the public school system, it is managed by separate boards under conditions that will bring into requisition the experience and knowledge of those most directly and personally interested—employer and employee—in the results of vocational training.

This new board, free from tradition, will not be tempted to organize compromise classes in industrial subjects with teachers at hand who are not well prepared to teach effectively from the point of view of the vocational requirements. The curriculum will not be passed upon by a large corps of teachers who have not made a study of industrial conditions and industrial teaching, but will receive the earnest attention of men who have been in a position to

feel the failures of the established educational systems and to study the reasons that contribute to these failures. The city superintendent may be relied upon to standardize the course from the educator's point of view. A further safeguard in this direction is effected by the provision that the courses of study must be approved by the State Superintendent of Public Instruction as well as by the State Board of Industrial Education, in order to secure state aid.

Continuation School Our Greatest Need

In Wisconsin, as elsewhere in this country, the greatest *present* need is for the Continuation School. In Germany, at Munich, manual training, household arts, and laboratory work in physics and chemistry are introduced in the 8th grade, all taught with vocational applications, yet, in that city the Continuation School is compulsory for the youth in employment between the ages of fourteen and eighteen years. In our country, though we offer the child, except in a few places, no vocational training in his elementary course, we make no effort to give him after he has left school the opportunity for such further training as would make him a good and desirable citizen. Of the two-fold situation, then, the more pressing problem if not the more important, is that which relates to the armies of little-trained workers engaged in more or less remunerative occupations.

Cause of Former Failures

That so many of the continuation evening schools that have been started in the larger cities of the United States have not been successful is not surprising to one who gives the matter consideration. It is unreasonable to expect that the boys and girls who have dropped out of the schools early from lack of interest (and this is true of most of them) will, after beginning work, develop so great an interest as to desire to attend a school in the evening, after a day of labor, similar to the day schools they have left. The only possible attraction for these workers would be schools that offer training immediately applicable to their vocations. Furthermore, in justice to the weary employe, an effort should be made to arrange for day rather than evening sessions.

The Wisconsin Apprenticeship Law

An Act passed by the last Legislature in Wisconsin relating to apprentices, provides that every indenture shall contain an agreement stating the number of hours to be spent in work and the number of hours to be allowed for instruction, the total number of hours not to exceed fifty-five in one week. An agreement is required between the employer and apprentice that not less than five hours of the aforementioned fifty-five hours per week shall be devoted to instruction. This Act provides further, that attendance at the school shall be certified to by the teacher in charge of the course, and failure to attend shall subject the apprentice to the penalty of a loss of compensation of three hours for every hour that such apprentice shall be absent without good cause.

Wisconsin's Compulsory "14 to 16" Law

Another Act provides that minors between the ages of 14 and 16, working under permit as now provided by law, shall attend school not less than five hours per week for six months in each year, and every employer shall allow all minor employes over fourteen and under sixteen years of age a reduction in hours of work of not less than the number of hours the minor is required to attend school. Thus, to the extent provided for in these Acts and in the Act relating to illiteracy, continuation education is now compulsory in Wisconsin.

Local Vocational Needs and Educational Adjustment

The fundamental principle in the organization of industrial courses, whether for the boys and girls still in school or for those in occupations, requires that these courses shall meet the needs of the community. A careful survey should be made, therefore, of the community interests.

The chart published by Mr. Bloomfield as a guide for those seeking information in order to advise young folk in the choice of vocations, will be found to be valuable in making a schedule for the industrial school inquiries. The following are some of the points that Mr. Bloomfield regards as important in their bearing upon the vocational needs of the individual. The plan will, of course, need to be modified to fit conditions in various communities.

NATURE OF OCCUPATION

Date of Inquiry

Name of Firm.....
Address.....
Superintendent or Employment Manager.....
Total number of employes Male
 Female
Number of boys.....; girls.....
Has there been a shifting in relative numbers of each?

Pay

Wages of various groups, and ages
Wages at beginning
Seasonal
Hours per day
Rate of Increase
 a. On what dependent
 b. Time or piece payment—any premiums or bonus?

Boys

How are boys secured?
Their ages
Previous jobs
Previous schooling
Are any continuing this training? Where?

The Industry

a. Physical conditions
b. What variety of skill required?
c. Description of processes (photos if possible)
d. What special dangers
 Machinery
 Dust
 Moisture
 Hard Labor
 Strain
 Monotony
Competitive conditions of industry
Future of industry
What chance for
 a. grammar school boy?
 b. high school graduate?
 c. vocational school graduate?
What opportunity for the worker to show what he can do in other departments?

Tests

What kind of boy is desired?
What questions asked of applicant?
What tests applied?

What records kept? (Collect all printed questionnaires and records.)
 Union or non-union?
 Comment of Employer
 Comment of Foreman
 Comment of Boys
 Health Board comments

Census Bureau Report on these Occupations in Wisconsin

Number of establish- ments	Capital invested	Value of stock	Wages paid	Average earnings	Males employed	Females	Value of product
.....

To questions taken from this chart the following should be added:

- (1) What has become of the boys and girls who left school before completing the 8th grade or the high school?
- (2) What was their degree of advancement in school?
- (3) How many of them would have remained in school if the courses were adapted to their needs?
- (4) How many of them would take advantage of continuation school opportunities?
- (5) How many persons, not included in this classification, would value continuation school opportunities?
- (6) Of those included in (4) and (5) how many could be reached by day schools? How many only by evening schools?

From the information gained in a thorough survey, the schedule of studies to be adopted for any given locality should be determined.

Three Problems for Continuation Education

Three main classes of workers will be found to whose needs the continuation courses must be adapted. The first class comprises those persons deficient in early education who are anxious to make up their deficiencies either in general culture or in such technical knowledge as will prepare them for advancement and increased earning power. The second class is made up of untrained but intelligent wage earners who will more or less readily recognize the value of opportunities for self-improvement brought to their attention. The third class includes employed persons of retarded mental development who have no ambition or desire for personal improvement and no appreciation of the possible value to them-

selves of training for a vocation. The problems of continuation education for the first and second classes are easily solved, while the third class presents difficulties similar to the most discouraging with which the truancy officer contends in the established schools. For a time at least the economic value of effort expended upon this class will not be apparent, either to themselves or to their employers. But it is this unambitious, sometimes indolent, often illiterate and drifting population that constitutes the greatest menace to a community. Fortunately the solution of their problem is possible. In nine cases out of ten this element is recruited from the ranks of the children whose school experience was fruitless because it made no appeal to their tastes or abilities. Vocational direction and opportunities in their school days would have developed useful citizens, and in vocational training now lies a possible hope of their regeneration.

Enough has been said to show that the first class will eagerly seek the opportunities of the continuation school while the second and third classes will have to be sought. For the latter classes the training must be made to apply specifically and definitely to the occupation and the individual, enlarging its scope as the worker overcomes his handicap and gains a normal interest in self-improvement. It is important to include as much as possible of study designed to improve the worker's capacity for enjoyment and general value as a social unit.

The Subjects in the Munich Curriculum

In Munich, the continuation school gives to its young machine workers instruction in the following subjects: Trade Calculation and Bookkeeping, one hour a week; Business Composition and Reading, one hour a week; Studies of Life and Citizenship, one hour a week; Mechanical Drawing, three hours a week; Physics and Mechanics, one hour a week, adding in the third year of the course—Machinery, one hour a week, and Materials, one hour a week. This schedule covers the various topics that should probably be given in our continuation schools for machinists, but, unfortunately, will generally be found to be too advanced. In many cases our industrial pupils will need to be taught beginner's mathematics, early lessons in English, and other branches of a decidedly elementary character.

To make our work effective, a large part of it will need to be given to individual students, or to small classes, on account of

the difference in preparation which the pupils have had. What has been said of the machinist may be said of the worker in every other manual occupation.

Semi-Vocational Schools

In a community where no one industry is of sufficient importance to determine the character of the vocational school, some common element of the several industries should be made the basis of the vocationalizing of the course. In many places it will be necessary to select a general trade, as for example, carpentry, as the foundation for vocational applications. The semi-vocational schools of Indianapolis and the elementary industrial schools of Cleveland, are excellent examples of successful vocationalizing, without application to any given industry, by methods that compel the interest of the pupils to a remarkable degree. In these schools the industrial and academic studies are so skillfully related as to arouse in many pupils a desire to continue academic work after completing the industrial course.

The elementary industrial school in Cleveland is an admirable example of the possibilities in this direction. This school was established for retarded children. It started with children from the 6th grade, not under thirteen years of age, who were retarded two years or more. While this school makes no applications to local industries it vocationalizes all the subjects taught and relates them to the shop or other manual work which the pupils are doing. The results obtained are marvelous. The interest of the heretofore sluggish pupils is aroused, and they not only desire to remain in school through the grammar grades, but frequently enter and complete the courses of the technical high school and occasionally the academic high school. The success of this work with retarded pupils illustrates the value of vocationalized training in the development of latent possibilities. It is extremely interesting to observe further that graduates from the Technical High School in Cleveland, though they have devoted a large proportion of their time to shop processes at the expense of academic studies, nevertheless, pass the examinations for college and carry the collegiate studies quite as well as, or better than, the graduates of the academic high schools.

In Indianapolis recently, the same examination in multiplication was given to 8th grade pupils of the semi-industrial and of the academic schools with the result of forty per cent perfect re-

turns from the semi-industrial against four per cent perfect returns from the academic pupils.

Educational Value of Shop Work

I have always believed in the possible educational value of shop work, but after visiting these modern industrial schools I am impressed anew with the importance of vocational training on account of its effect upon the academic studies. No one who has observed the intense interest displayed by classes, we will say in mathematics, when the problems are applied to their shop exercises, can question the increased value which this application gives to the training. Every teacher knows that in the teaching of fractions through a problem which involves calculating dimensions, the allowance for finish, and all the information that may be related to a shop project, or anything upon which manual work is to be or has been done—every good teacher knows that a problem so treated can be made much more effective and stimulating to the average pupil, than the unrelated problem, however specific and concrete. The same principle applies in the teaching of English, industrial geography, bookkeeping, chemistry, civics, and other subjects. To many pupils the only interest lies in the relation of these studies to action or observation. These are fundamental truths in the experience of all teachers, but especially of the industrial teacher.

Necessary Variation in the Industrial Curriculum

It will be found that the industrial courses needed and those asked for, will not always be the same. A careful study of a conscientious survey should enable the board to determine the actual needs of a community and the best methods by which to meet them. Great care should be exercised, however, not to introduce studies in the curriculum, however much they may be needed, for which no suitable teacher is available. It is especially important in the first stages of this development to attempt nothing that cannot be done well.

The Working Plant as Laboratory

In the provision of schedules for workers in specific industries, it is probable that the pupil should be required to take this training in the practical processes of the industry, at the working plant. The coöperation between the employer and the school should be so

close that the association of the related studies with the manual processes will be maintained. To accomplish this association the teacher will find it necessary to keep in touch with the work in the shop, while the employer or his representative will not fail to visit the school. Where possible, industrial equipment (working machinery) should be provided at the schools for instruction in the educational phases of the practice which it might be difficult to give at the works. Too much stress cannot be laid, however, upon the importance of keeping in touch with the operations at the plant and everything that relates to them.

There is no reason why the equipment now used by the schools in their regular instruction, when adapted to the needs of the pupils, should not be used for industrial instruction also, by scheduling the industrial classes at times when the equipment is available. Of course, this implies sympathetic relations between the school board and the industrial education board. As the latter is appointed by the former and as the city superintendent is equally interested in both departments of work, there should be no difficulty experienced in adjusting the relations of the two. Every effort should be made to avoid unnecessary expense. If the new schools are made financially burdensome they will not receive the support necessary to insure their success.

Qualifications of the Industrial Teacher

Discussion of the qualifications required in the industrial teacher should be given a larger space than I may impose upon you at the present time. The matter is one of essential and vital importance.

As bearing upon the subject, it may be of value to consider the following observations made by an instructor, who is teaching high school boys and an evening continuation class. The writer is a shop trained man and an excellent teacher. His report came to me voluntarily. He presents forcibly certain fundamental principles.

"The question as to whether shopboys or schoolboys make the best students in mechanical drawing, has been brought to me several times. Also, the question as to whether boys who have had manual training, show any particular advantage over other boys.

"While my experience with schoolboys is somewhat limited, compared with my experience with shopboys, I am certain of one thing and that is this; it is much easier to teach mechanical drawing to shopboys than to schoolboys, even though the schoolboy's education is considerably greater than that of his shop companion.

One of the reasons for this is that the shopboy is usually working in direct line with the kind of object he draws, and consequently it is easier for him to comprehend the reason for making certain views, the dimensioning of same, etc. However, I think that the main reason for this seemingly reverse condition is because the discipline of the shopboy and of the schoolboy is different.

"The schoolboy's idea is that he should be *told* all the facts. The shopboy has been taught to use his own judgment and to reason out the many facts he does not know from the few he does know. Consequently, when it comes to a question of judgment or of following instructions accurately the shop discipline of the shopboy makes him the best man. The schoolboy's main question is 'how?' The shopboy's main question is 'Why?'

"The schoolboy has had the advantage of a teacher always present to help him every time he strikes a difficult problem, and therefore, seldom develops that quality of self-reliance found in the average shopboy.

"The question of accuracy might be brought up also. The shopboy usually sees the necessity of accuracy; the schoolboy too often does not. Much of his regular school work demands fully as much accuracy, but he takes that as a matter of course, and seldom seems to think that it is necessary in practical work.

"This is also often true of the boy who has had manual training. Manual training drawing does not require as much detail work as the machine shop drawing, and I do not believe that the question of accuracy is brought to bear upon the boy's work as much as in machine shop drawing. I have learned from experience that if a boy has been in the habit of doing careless work, it is difficult to break him of the habit. While in practical work he may become known as a fast workman, he will also get the reputation of doing rough and inaccurate work. Accuracy is an absolute necessity in making good drawings of machine details.

"I cannot say that boys who have had manual training work show any particular advantage over the other boys. While manual training drawing is also a form of mechanical drawing, since the drawings are made by the use of the Tee square and triangles, the style of some of the lines, figures, arrow heads, etc., is generally different from those used in practical machine drawing. Consequently, the boy who has had manual training drawing finds it difficult for some time to get used to the new conditions brought out in the machine drawing. Unless the manual

training boy has had two or three years of manual training, he seldom shows any advantage over other schoolboys or shopboys.

"Comparing shopboys and schoolboys as a whole, the shopboy is more settled in his ways and does not expect the same attention as the schoolboy. The schoolboy is more sensitive—particularly the young ones—and a proper amount of encouragement is an essential factor in gaining the best results from him. The shopboy is used to 'bumps' and seldom looks for encouragement.

"It seems to me, therefore, that the main reason for these differences is that the 'practical discipline' which the shopboy has had, makes itself felt in the school room, and this indicates that practical courses by practical men are what are needed for the successful development of both schoolboys and shopboys, if they are to become practical men."

In my judgment, the "practical man" from whom I have quoted the foregoing opinion is correct in his deductions. I do not believe that an instructor can be really efficient in teaching shop mathematics, for example, if he has not done shop work in a working plant. The actual experience in shop practice gives the teacher not only the shop technique but also a useful appreciation of the conditions of shop life which the boys must meet in their daily work. Men who have had experience in industrial teaching appreciate the absolute importance of this special preparation. For instance, the success of Y. M. C. A. directors, whose evening schools for a long time were more successful perhaps than any others, is largely attributable to the fact that their industrial classes are taught by industrially trained men. In fact, wherever successful vocational teaching is found, there will universally be found the teacher who can point to his practical training. Of course one would not argue that a teacher thoroughly trained pedagogically who has had practical experience as well, might not make the best instructor, yet very often the shop atmosphere and shop attitude of mind are drilled out of the pedagogue and he becomes inefficient for instruction of the kind needed in vocational schools.

Mr. Stetson, Principal of the Central Grammar School of Grand Rapids, in a recent article, makes the following comment upon the teachers in the Grand Rapids evening vocational schools. They have twenty-four teachers who are expert workmen. He says, "One is a blacksmith, another holds a Union card as a machinist, six are dressmakers, another a carpenter, and so on through the list. They are not hampered by any pedagogical

precepts. The useless matter of the subject is at once apparent to them. These teachers appeal to the student because they are everyday workers in the trade the student is trying to learn. For example, the teacher of mechanical drawing in the evening high school is a graduate of a university and works by day as a draftsman in a large factory. When he enters his class he removes his coat and talks to the pupils in a language they understand and in a way a professional teacher could not." "No evening school can hope to be successful," he continues, "unless it breaks away from the traditional methods and teachers and employs teachers who can give the pupils what they wish. The theatre, the dance, the companionship of friends, all beckon to the young people determined to give their evenings to school. Efforts to hold them at their work are not successful without the constant advice of one who understands their problems."

What Mr. Stetson says of his school applies equally well to any vocational school and unless this is thoroughly appreciated by those in whose hands is placed the responsibility of selecting the teachers for our vocational schools under the new law, these schools will not succeed. I should prefer to see few classes started with the right kind of teachers, than many classes with teachers of uncertain qualifications. There is that something that comes to the man who has done work in a practical way in the atmosphere of the working plant, rubbing up against other men engaged in the serious occupation of earning their daily bread, that cannot be gained in any school shop. Probably no one here has a higher appreciation of the value of the training of the industrial schools for teachers than have I, but I do not believe that they can supply competent teachers of industrial subjects in vocational schools without requiring experience in a working plant as part of the teacher's preparation.

A few days ago I visited a school in a large manufacturing company in one of the leading cities of the country. The school was in charge of a graduate of the Massachusetts Institute of Technology and had been organized only a few months. The course of instruction as mapped out covered three years. In my judgment it did not compare favorably with courses in similar and successful corporation schools. Upon inquiry it was found that the instructor who prepared the course had had no shop experience except that gained in his college course. I feel safe in predicting that if that school is successful it will be with a less academic

schedule of instruction than the one now in operation. If in a corporation school developed by a technically trained teacher, a mistake of this nature can be made, how essential it would seem to be that the teachers selected for Wisconsin's industrial schools shall be drawn from the ranks of the industrial *workers*.

The Problem of Instructional Texts

It is an interesting fact that the most successful vocational schools are preparing their own instructional texts. Where it is possible to secure teachers capable of performing this requirement it would seem to be the best method to follow, as standardization of lessons is not to be desired. The personal equation of the teacher must enter into his work in a manner not possible with standardized texts. For a long time to come, however, it will not be possible as a rule to secure teachers who will be independent of at least partial texts in their class work. These should be used only as guides, however, with the aid of which the teacher will work out his own conceptions of the subject.

The practice of holding up to all classes of students, regardless of ability and attitude, the prize of remunerative and important positions is baneful. It is a temptation to be rigidly avoided. Where there is capacity for higher achievement the student must, of course, be encouraged to work for the larger opportunity; this method of education should and does discover latent powers; but the attempt to make lawyers, doctors, or teachers, of men qualified to excel only in mechanical labors, has led to many a misfit and the discouragement and ruin of good men.

Wisely vocationalized public schools and well organized continuation schools will do much towards dignifying all occupations, and thus will create contented and happy classes where discontent now frequently exists.



